

## Physics ECAT Pre Engineering Chapter 17 Physics of Solid

Sr	Questions	Answers Choice
1	The critical temperature of mercury is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
2	The electrons occupying the conduction band are known as	A. conduction electrons B. free electrons C. both of them D. none of them
3	The substances in which, atom are so oriented that their fields support each other and the atoms behave like tiny magnets, are called	A. diamagnetic substances B. ferromagnetic substances C. paramagnetic substances D. all of them
4	The charged nucleus of an atom itself spins its magnetic field	A. equal to the field produced by orbital electrons B. greater than the field produced by orbital electrons C. much weaker than the field produced by orbital electrons D. none of these
5	The vast majority of solids are in the form of	A. amorphous structure B. polymeric structure C. crystalline structure D. all of them
6	When a large number of atoms are brought close to one another to form a solid, each energy level of an isolated atom splits into sub-levels, called	A. energy bands B. energy shells C. states D. all of them
7	The transition from solid to liquid is actually from:	A. Order to disorder B. Disorder to order C. Order to order D. Disorder to disorder E. None of these
8	Which of the following can become a good permanent magnet	A. iron B. steel C. both of them D. none of them
9	Experiments revealed that the ratio of the stress to the strain is a constant value for	A. different material B. all materials C. a given material D. all of them
10	Examples of polymeric substances are:	A. Plastic B. Synthetic rubbers C. Zirconia D. All of these E. Both (A) and (B)
11	The electrons in the outermost shell of an atom are called	A. core electrons B. valence electrons C. high energy electrons D. none of them
12	When a stress changes length, it is called the	A. compressional stress B. tensile stress C. shear stress D. any one of them
13	The critical temperature of tin is	A. 1.18 K B. 4.2 K C. 3.72 K D. 7.2 K
14	Recent studies of ferromagnetism have shown that there exists in ferromagnetic substances small regions called	A. tiny regions B. domains C. vectors D. none of them

15	The temperature at which the vibrations become so great that structure of the Crystal breaks up, is called:	A. Critical temperature B. Temperature of vaporization C. Melting point D. Both (A) and (C) E. Both (A) and (B)
16	The ratio of linear stress/linear strain is called as	A. Yong's modulus B. Bulk modulus C. Shear modulus D. Modulus
17	The pattern of NaCl particles have a shape which is :	A. Cubic B. Body centred cubic C. Simple cubic D. face centred E. Both (A) and (C)
18	In the doping process, the ratio of the doping atoms to the semi conductor atom is	A. 1 to 10 B. 1 to $10^{3-}$ C. 1 to $10^{6-}$ D. 1 to $10^{9-}$
19	Amorphous solids are also more like	A. crystalline solids B. gases C. liquids D. any one of them
20	Tick the one which is not a crystalline solid:	A. Zirconia B. Glass C. Copper D. Ceramic solid E. An ionic compound